**Social Studies CH. 8**

**Lesson 1**

**Transportation Over Time**

**Objectives**

- Explain how individuals such as Meriwether Lewis and William Clark contributed to the expansion or creation of communities. - Compare the ways people in a community meet their needs for transportation over time and in the present. - Identify inventors who have developed new technologies and explain their impact on daily life.

**Vocabulary**

Transcontinental Railroad, p. 244 Word Exercise Related Word Study Tell students that the prefix transmeans across, over, or through. Ask them if they remember what continent means, then guide them to realize what transcontinental means (across the continent). Then ask what they think transatlantic would mean (across the Atlantic Ocean). Point out transportation in the target skill paragraph. Discuss how this word might be related to the idea of across or over.

**Reading Skill**

Cause and Effect In the Lesson Review, students complete a graphic organizer like the one below. You may want to provide students with a copy of Transparency 18 to complete as they read the lesson. Use Transparency 18

**Quick Teaching Plan**

Quick Teaching Plan If time is short, have students make flashcards summarizing events that have changed transportation over time. - Collect and shuffle the cards. - Have students put the cards in chronological order, explaining how each new form of transportation changed communities.

**Introduce and Motivate**

1. Introduce and Motivate Preview: To activate prior knowledge, ask students what forms of transportation people use today to travel long distances. Tell students they will learn how transportation has changed as they read Lesson 1. You Are There Have students look at a map of the United States and follow Lewis and Clark's route. Ask them what rivers Lewis and Clark might have followed to the Pacific Ocean.

**Teach and Discuss**

2. Teach and Discuss Pages 243: Trails Across America Quick Summary Lewis and Clark's expedition inspired people to move west. Test Talk Use Information from the Text 1. Did Lewis and Clark use the same means of transportation as the settlers on the Oregon Trail? Why or why not? Students should ask themselves where in the text they might find details to answer the question. Point out that the text on p. 243 provides information leading to the correct answer. No; Lewis and Clark went by water, on foot, and on horseback. The settlers used covered wagons. Compare and Contrast 2. Do you think Lewis and Clark's expedition would have been successful without Sacagawea? Explain. Possibly not. They might not have made it through the Rocky Mountains without her as their interpreter. Draw Conclusions 3. How did Lewis and Clark contribute to the growth of new communities? They explored land west of the Mississippi River. Their stories made people want to move there. Apply Information Review Answer Lewis and Clark brought back stories that made people want to move west in search of a better life. Cause and Effect Page 244: Westward Expansion Quick Summary The steam locomotive and the Transcontinental Railroad made travel faster and safer. 4. What were two reasons some people moved west? To seek their fortunes (p. 244), in search of a better life (p. 243). Main Idea and Details Ongoing Assessment If... students have difficulty remembering two reasons people moved west, then... have them read p. 243 and p. 244 again. 5. How did James Watt and Richard Trevithick change the way people traveled? Their inventions led to the creation of the steam locomotive and the building of railroads. Apply Information 6. Do people in the United States today use the same forms of transportation as people in the 1800s? Why or why not? People still walk and use trains, but few use horses or covered wagons because they can be slow and uncomfortable. Faster, more convenient forms of transportation have replaced them. Compare and Contrast Review Answer Made traveling west safer and faster Cause and Effect Map Adventure 7. On the map, how can you tell the difference between the Oregon Trail and the Transcontinental Railroad? Different symbols are used on the map and map legend. Interpret Maps 8. Where does the Oregon Trail end? Oregon City, Oregon Interpret Maps Map Adventure Answers 1. Nebraska, Wyoming Territory 2. North Platte River 3. Fort Kearny Social Studies Strand Geography Mental Mapping: Ask students to draw an outline of their state from memory. Then discuss why some state borders are straight lines and other state borders are wiggly. Page 244: Trains, Cars, Planes, and Space Shuttles Quick Summary Cars and planes became popular forms of transportation in the twentieth century. 9. Was the gasoline-powered car invented in the United States? Explain. No; the first one was developed in Germany. Apply Information Social Studies Strand Culture Point out that the car changed the way many people lived. Cars allowed people to live farther from their jobs. People also could go where they wanted without having to worry about train schedules and routes. 10. What other effects did the invention of the car have? Roads and highways were built across America and other parts of the world. Cause and Effect 11. What famous event in Kitty Hawk, North Carolina, changed how people traveled? Orville and Wilbur Wright flew the first airplane. Apply Information Review Answer The automobile made the United States seem smaller. The airplane made the world seem smaller. Cause and Effect

**Close and Assess**

3. Close and Assess Summarize the Lesson Have students create five true/false statements using the three main points from the lesson. Then have students use their statements to quiz each other in small groups. Lesson 1 Review 1. Cause and Effect For possible answers, see the reduced pupil page. 2. Native Americans 3. By wagon train 4. Air travel 5. Critical Thinking: Make Inferences Faster and safer Link to Mathematics Make sure students understand that a yardstick equals three feet.

**Use a Time Line**

**Objectives**

- Develop simple time lines of events that have occurred. - Interpret time lines. - Describe historical times in terms of years, decades, and centuries.

**Vocabulary**

decace, p. 248; century, p. 248;

**Introduce and Motivate**

1. Introduce and Motivate What is a time line? Ask students how arranging events in the order in which they happened might help them study history. (It makes it easier for people to see how much time passed between events and when something happened in relation to something else.) Then have students read the What? section of the text on p. 248 to help set the purpose of the lesson. Why use a time line? Have students read the Why? section of the text on p. 248. Ask them what types of events they might put on a time line for Lesson 1. (Events about the exploration and settlement of the West or events showing changes in transportation)

**Teach and Discuss**

2. Teach and Discuss How is this skill used? Have students examine the time line on pp. 248-249 and then make a list of dates from Lesson 1. - Point out that the earliest date (1821) appears at the left on a time line. The most recent date (1890) appears at the right. - Point out that a time line is drawn to scale. In this time line, about 13/8 inches stands for 10 years. - Have students read the How? section of text on p. 249 and make a time line. 1. Florida and Texas became states in 1845. Between which two dates would they appear on the time line? Between which states? 1840 and 1850; after Missouri and before California Interpret Time Lines 2. When did California become a state? 1850 Interpret Time Lines 3. After Missouri became a state, how much time passed before Wyoming became a state? 69 years Interpret Time Lines

**Close and Assess**

3. Close and Assess Think and Apply 1. 1860s 2. Wyoming 3. One

**SS Lesson 2**

**Communication Over Time**

**Objectives**

- Compare ways people in the local community and communities around the world meet their needs for communication over time and in the present. - Recognize the historical significance and contributions made by individuals such as Benjamin Franklin. - Identify inventors who have developed new technologies and explain their impact on daily life. Identify causes and effects of changes that have occurred.

**Vocabulary**

Pony Express, p. 252; Morse code, p. 253; Invention, p. 253; broadcast, p. 254 Word Exercise Related Word Study Point out that this lesson is about communication. Have students discuss ways people communicate today. Remind students that talking and sending notes are forms of communication. Point out that the lesson title says "over time," so this lesson is about history. Determine if students know the word pony, then ask how they think a pony might have helped people communicate in the past.

**Reading Skill**

Cause and Effect In the Lesson Review, students complete a graphic organizer. You may want to provide students with a copy of Transparency 15 to complete as they read the lesson. Use Transparency 15

**Quick Teaching Plan**

Quick Teaching Plan If time is short, have students draw examples of changes in communication. - Have each student draw a picture of a new means of communication from the lesson and label it with its name and year of invention.

**Introduce and Motivate**

1. Introduce and Motivate Preview: To activate prior knowledge, ask students how they communicate with their friends and family. Tell students they will learn more about how communication has changed over time as they read Lesson 2. You Are There Ask students how mail was sent across the country in 1860. Then have them compare those methods with how mail is sent across the country today.

**Teach and Discuss**

2. Teach and Discuss Page 251: Mail by Horseback Quick Summary Benjamin Franklin ran the postal service and speeded intracity mail delivery, but long-distance service was still slow. 1. Why do you think mail in 1800 was delivered much faster within a city than between states? Local mail traveled a much shorter distance than interstate mail. Long-distance travel still took a long time in 1800. Make Inferences 2. How do you think today's mail service is similar to early service? How is it different? Similar: they both delivered mail. Different: modern mail service is more automated and much faster. There are many more post offices today. Compare and Contrast Review Answer There was no easy way to get letters between the eastern and western parts of the country. Draw Conclusions Page 117: Mail by Pony Express Quick Summary The Pony Express cut mail delivery time in half. Later, mail was transported on the Transcontinental Railroad. Decision Making 3. Suppose you were going to send a letter from St. Joseph, Missouri, to your grandmother in Sacramento, California, in 1860. Would you send your letter by Pony Express or a wagon train? Why? Possible answers: Pony Express because wagon trains often were delayed by attacks or bad weather Make Decisions Map Skill The Route of the Pony Express 4. If you traveled the entire Pony Express route shown on the map, which states would you pass through? Missouri, Kansas, Nebraska, Colorado, Wyoming, Utah, Nevada, California Interpret Maps Map Skill Answer: Wyoming 5. What caused the post office to begin using the Transcontinental Railroad for mail delivery? It was faster and safer. Cause and Effect Review Answer Mail was delayed or lost. Cause and Effect Page 253: The Telegraph and Telephone Quick Summary Communication became much faster and easier with the invention of the telegraph and the telephone. 6. How did Samuel Morse improve communication? He invented the telegraph, which enabled people to send messages over long distances in seconds. Apply Information 7. Why do you think Alexander Graham Bell is famous? He invented the telephone. Main Idea and Details 8. How is the telephone similar to the telegraph? How is it different? Similar: both provide ways to communicate over long distances. Both use wires to send messages. Different: the telephone allows people in different places to talk to one another directly. It saves time spent writing and sending telegrams or waiting for an answer. The telephone is easier to use because users do not have to know Morse code. Compare and Contrast Ongoing Assessment If... students have difficulty with this question, then... have them discuss and model how the telegraph is used and how the telephone is used. 9. How do you think highways in Indianapolis have changed since the National Road was built? Possible answers: They are wider and better paved. Hypothesize Review Answer They made communication faster and easier Cause and Effect Page 254: Radio and Television Quick Summary In the twentieth century, the invention of the radio, television, communications satellite, and Internet improved communication throughout the world. 10. How did Guglielmo Marconi improve communication? He invented the radio, which allowed words to travel without wires. Analyze Information Social Studies Strand Culture Point out that television changed how people lived. Instead of going out, people began spending their free time at home watching TV. The frozen TV dinner and the TV tray table were invented in the 1950s. 11. How do today's television sets compare to early television sets? Similar: They both show moving pictures with sound. They both convey information and entertainment. Different: Early screens had only black-and-white pictures; now pictures are in color. Compare and Contrast (See the Online Teacher Edition)

**Close and Assess**

3. Close and Assess Summarize the Lesson Have students take turns reading aloud the five main points. Then have students make a list of important events and their dates from this lesson to be included on the time line they created on p. 249. Lesson 2 Review 1. Cause and Effect For possible answers, see the reduced pupil page. 2. To make sure mail was delivered more quickly and safely 3. Morse invented the telegraph, and Bell invented the telephone. Both devices allowed people to communicate more quickly. 4. It enabled people all over the world to hear information. 5. Critical Thinking: Draw Conclusions: People often need to get in touch with each other quickly. People want to know news as soon as it happens. When communication methods are easy to use, more people are able to participate. Link to Writing Tell students to write neatly and use good penmanship. Paragraphs should include examples of how the chosen form of communication affected or changed a community or the lives of people living there.

**Students of West Columbia, South Carolina**

**Objectives**

- Identify ordinary people who exemplify good citizenship.

**Introduce and Motivate**

1. Introduce and Motivate Preview: To activate prior knowledge, ask students if they can recall a time when a natural disaster or an accident of some kind happened in their state or somewhere else in the United States. Encourage volunteers to describe these events. Ask students to recall how people showed that they cared for the victims of the disaster or accident.

**Teach and Discuss**

2. Teach and Discuss Social Studies Strand Citizenship 1. Democratic Values and Institutions Remind students that caring about others is part of being a good citizen. What did these schoolchildren from South Carolina do that was an example of good citizenship? They raised money to buy a fire truck for the people of New York City after the terrorist attack of September 11, 2001. Main Idea and Details 2. Why was a fire truck an especially good gift? One reason is that New York City needed fire trucks because 92 of their trucks were destroyed during the collapse of the World Trade Center towers. Another reason is that in 1867, New York City gave the city of Columbia, South Carolina, a fire truck to replace theirs, which had been destroyed when Columbia was burned during the Civil War. Main Idea and Details 3. Look at the photographs. How has fire-fighting equipment changed over the years? Possible answer: Firefighting equipment now is more modern and more powerful. Analyze Pictures 4. What other ways can you think of that students could use to raise money for a special cause? Possible responses: having car washes, selling soft drinks at sporting events, dance marathon Express Ideas

**Close and Assess**

3. Close and Assess Caring in Action Inform students that the Red Cross is a volunteer organization that helps provide relief to victims of disasters. In the aftermath of the events of September 11, 2001, the 2004 tsunami disaster, and Hurricanes Katrina and Rita of 2005, the Red Cross raised billions of dollars to help the victims and their families. Encourage students to find volunteer groups in your area and determine what they have done to help your community. Link to Current Events - Have students read the headlines of the newspaper stories.-Ask students to summarize how the people in these news stories show caring. - Ask students to summarize how the people in these news stories show caring.

**SS Lesson 3**

**Inventions Over Time**

**Objectives**

- Identify scientists and inventors, such as Louis Daguerre, Cyrus McCormick, Thomas Edison, Lewis Latimer, and George Eastman, who invented new technology. - Identify the impact of new technology in photography on communities around the world. - Identify the impact of new technology in farm equipment on communities around the world.

**Vocabulary**

reaper, p. 260 Word Exercise Related Word Study Tell students that a reaper is a machine that cuts grain. A machine is a thing, so reaper is a noun. Remind students that the suffix -er means "one who." This suffix turns a verb into a noun. Ask students what they think the verb reap means. ("to cut grain") Help students look reap up in the dictionary to check their answers. Then have students use either form in a sentence.

**Reading Skill**

Cause and Effect In the Lesson Review, students complete a graphic organizer like the one below. You may want to provide students with a copy of Transparency 18 to complete as they read the lesson. Use Transparency 18

**Quick Teaching Plan**

Quick Teaching Plan If time is short, have students make a mobile to illustrate important inventions. - Have students use pictures, captions, and labels.. - Then review with students how these inventions have affected people's lives.

**Introduce and Motivate**

1. Introduce and Motivate Preview: To activate prior knowledge, ask students to name some inventions they have already studied in this chapter and explain how they helped improve people's lives. Tell students that they will learn more about inventions as they read Lesson 3. You Are There Ask students what invention this passage describes and what type of power it needs to operate. Then ask students to name some places where light bulbs are used.

**Teach and Discuss**

2. Teach and Disucss Page 259: Inventions at Work Quick Summary Thomas Edison's invention of the light bulb provided safe lighting. 1. Why do you think Edison invented the light bulb? Possible answers: To reduce the danger of fire, to make money, to provide better light Apply Information 2. How did Thomas Edison light up the world? He invented the light bulb, which allowed offices and factories to stay open after dark. Analyze Information 3. Which other inventor played a role in lighting communities around the world? Lewis Latimer Main Idea and Details 4. Sometimes cartoons show a person with a light bulb over his or her head. What do you think this symbol means? Possible answer: It means that the person has an idea or has "seen the light." Make Inferences Review Answer People could have light whenever they wanted it. Factories and offices could stay open around the clock. Page 260: Inventions in Farming Quick Summary In 1831 Cyrus McCormick invented a reaper that made harvesting grain much easier. Social Studies Strand History Point out that McCormick's reaper helped farmers produce more food. It also was the first of a number of machines that changed how people farmed in the United States. 5. How did the reaper help make life easier for farmers? A farmer using a reaper could do more work than the farmer alone. The farmer could work faster or harvest more grain. Analyze Information 6. Why do you think the reaper was pulled by a horse? Possible answer: It was too heavy to be pulled by a person, and the gas-powered engine had not yet been invented. Analyze Pictures Ongoing Assessment If... students have difficulty with this question, then... ask them how most farm machines are powered today. Review Answer Instead of cutting the grain by hand, farmers could use a machine, which made harvesting crops easier and more efficient. Draw Conclusions Page 261: Smile for the Camera Quick Summary Louis Daguerre invented a way to make "photographs." George Eastman invented a simple camera. 7. How do you think the daguerreotype got its name? It was named after Louis Daguerre, who invented the process used to develop that type of picture. Draw Conclusions 8. Why is the daguerreotype important? It was the first step toward modern photography. Main Idea and Details 9. Compare early cameras to cameras people use today. Similar: both take pictures. Different: today cameras can record color photographs, movies, digital images, and videos. Compare and Contrast Review Answer Because anyone could use it to take a picture Draw Conclusions Fact File New Technologies 10. What are the advantages of a handheld computer over a desktop computer? What are the disadvantages? Possible answers: Advantages: lighter, smaller, more portable; Disadvantages: small screen Analyze Pictures 11. What are some uses for CDs? What did people use before compact discs were invented? Possible answers: storing music, computer information, pictures, games; listened to records and cassette tapes and played games from floppy disks Generalize Page 263: The Information Age Quick Summary New advances in technology, such as computers, change the way people work and live. 12. Why do people say we are living in the Information Age? Possible answers: Because people can use the Internet and other resources to get news and other information that they might have had to wait hours, days, or weeks for in the past; people can receive messages from all over the world in seconds using email. Make Inferences (See the Online Teacher Edition)

**Close and Assess**

3. Close and Assess Summarize the Lesson Have students take turns reading aloud the main points. Then have them list important inventions and their dates and include them on their time line (see p. 249). Lesson 3 Review 1. Cause and Effect For possible answers, see the reduced pupil page. 2. He helped light up these cities. 3. By hand, using a sharp blade on a long handle 4. Modern video cameras, digital cameras, and instant cameras 5. Critical Thinking: Evaluate Answers will vary. Link to Mathematics Have students compare and contrast their graphs and find the class average.

**Spreading the News**

**Objectives**

- Compare and contrast the methods of communication used in the 1700s with those used today. - Explain how technology affected communication in the 1700s and how it affects it today.

**Introduce and Motivate**

1. Introduce and Motivate - Have students, as a class, list ways in which they communicate. - Inform students that in the 1700s people did not use electricity and many people could not read or write. - Using this information about the 1700s and the list they created, have students predict which methods of communication people used in the 1700s.

**Teach and Discuss**

2. Teach and Discuss - Talking: This photograph shows interpreters portraying people of the past speaking, or "exchanging the news." Many people in the 1700s received no formal education and could not read or write. The method of communication used by everyone was talking. Ask students what kinds of news they communicate by talking. - Writing Letters: This photograph shows a woman writing a letter with a quill pen and ink. It took more than a week for a letter to travel from Boston to Williamsburg, Virginia, and two or three months to reach Britain. Ask students how and with what materials they write letters today and how quickly their letters travel. - Setting Type: This photograph shows how a printer set type-letter by letter and in reverse. This "movable type" was invented in the 1400s. Once the type was set, paper was laid on top and pressed onto the type. This allowed printers to make many newspapers in a short period of time. Ask students how the printing press allowed news to travel more quickly. - Printing a Newspaper: This photograph shows an interpreter portraying Williamsburg printer Clementina Rind reading a newly printed copy of her newspaper, the Virginia Gazette. Ask students to discuss the types of information newspapers provide to readers today.

**Close and Assess**

3. Close and Assess - Review with students the 1700s methods of communication they identified. - Ask students to discuss the similarities and differences between the methods of communication used in the 1700s with those used today. Have them discuss why most modern communication is faster than it was in the 1700s. - Using their list of present-day methods of communication, have students write a paragraph describing the methods of communication they use and with whom they communicate.

**Lesson 4**

**Medicine Improves Over Time**

**Objectives**

- Identify scientists and inventors, such as Louis Pasteur, Edward Jenner, Jonas Salk, and Gertrude Elion, who have created new technology. - Identify the impact of new technology in pasteurization on communities around the world. - Identify the impact of new technology in medical vaccines on communities around the world.

**Vocabulary**

pasteurization, p. 267; vaccine, p. 268 Word Exercise Context Clues Point out the name Louis Pasteur in the list on this page. Explain that pasteurization was named after Pasteur, who invented this process. Point out to students that remembering the history of a word can help them remember what it means. (Louis Pasteur was a scientist who studied diseases. Pasteurization is a way to kill off germs in milk.)

**Reading Skill**

Cause and Effect In the Lesson Review, students complete a graphic organizer like the one below. You may want to provide students with a copy of Transparency 18 to complete as they read the lesson. Use Transparency 18

**Quick Teaching Plan**

Quick Teaching Plan If time is short, have students read the lesson independently, noting important medical discoveries and who made them. - After each section of the lesson, have students list the medical discoveries they read about.

**Introduce and Motivate**

1. Introduce and Motivate Preview: To activate prior knowledge, ask students if they have ever had a shot (vaccination) to help prevent a disease. Tell students they will learn how some medical discoveries have improved people's health as they read Lesson 4. You Are There Have students suppose someone has come to class with a cold. Ask them if other students in the class might catch it. Why or why not? Ask students how they think diseases are spread.

**Teach and Discuss**

2. Teach and Discuss Page 267: Edward Jenner and Louis Pasteur Quick Summary Over time, people such as Edward Jenner and Louis Pasteur developed new ideas about ways to fight disease. These ideas have changed the health of people in communities around the world. 1. How did Edward Jenner's medical vaccine help improve the health of people in communities around the world? Why was this important? There were fewer deaths from smallpox in communities where people were given the vaccine. Draw Conclusions 2. What idea did Pasteur have that changed the lives of people in communities over time? How did this idea change their lives? Possible answers: The idea that some diseases are caused by germs; by keeping certain germs out of peoples bodies (through the pasteurization process), people became healthier. Main Idea and Details Review Answer In communities that pasteurized milk, milk became safer to drink. Fewer people became sick, and the community became healthier. Draw Conclusions Pages 268-269: Jonas Salk and Gertrude Elion Quick Summary Jonas Salk invented a vaccine to keep people from getting polio. Gertrude Elion developed medicines to help people who had leukemia and malaria. 3. Why would a school require children to have vaccinations? Possible answers: The school wants to protect children's health; it does not want a sick child spreading a disease to other children. Make Inferences Ongoing Assessment If... students have difficulty imagining why vaccinations might be required in schools, then... ask them what often happens when a sick child exposes other children to an illness. Social Studies Strand Science - Technology Point out that in the United States children usually are vaccinated against diseases such as polio, measles, mumps, chicken pox, tetanus, and whooping cough. 4. Explain to students that both Elion and Salk used the ideas of others. What idea did Jenner have that Salk used to improve the health of people in communities over time? To make a vaccine (a weak or killed form of a disease) to protect people from a disease Main Idea and Details Review Answer Jenner's ideas influenced Salk to work on developing a vaccine against polio. Draw Conclusions

**Close and Assess**

3. Close and Assess Summarize the Lesson Have students create a crossword puzzle on chart paper, using information from this lesson. Tell students to exchange completed puzzles and try to solve them. Lesson 1 Review 1. Cause and Effect For possible answers, see the reduced pupil page. 2. Heating the liquid to kill the germs 3. By vaccination 4. Nobel Prize Test Talk Write Your Answer to Score High 5. Critical Thinking: Draw Conclusions Ask students to reread their answer to make sure it is correct, complete, and focused on the accomplishments of Edward Jenner. He observed people who did not get smallpox. He figured out what they had in common. Link to Science Drew was an African American doctor who developed ways to process and store blood plasma. He helped save many lives as the medical director of the American Red Cross's blood-donor project during World War II.

**Solve Problems**

**Objectives**

- Use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution.

**Introduce and Motivate**

1. Introduce and Motivate What is problem solving? Ask students to define the word problem. Ask them how they react when they are faced with a problem. Then have students read the What? section of the text on p. 270 to help set the purpose of the lesson. Why solve problems? Have students read the Why? section of text on p. 270. Ask them what might happen if no one ever tried to solve a problem.

**Teach and Discuss**

2. Teach and Discuss How is this skill used? Examine with students the six-step problem-solving process described on p. 271. - Have students read the How? section of the text on pp. 270-271. - Point out that the text shows the problem-solving process French scientist Louis Pasteur followed to help people stop getting sick from drinking milk. - Explain that the same process can be used to solve many different types of problems. Encourage students to substitute different problems for the one listed in Step 1. 1. In the problem-solving process, which should you do earlier, list options or gather information? Why do you think this is so? Gather information; Possible answer: The information you gather can help you decide on logical options. Sequence 2. Edward Jenner followed a problem-solving process to find a cure for smallpox. What information did he gather before he determined his options? He observed that once a person had cowpox, he or she did not get smallpox. Apply Information 3. Imagine that you have completed all six steps of the problem-solving process, but your solution failed. What should you do next? Possible answer: Start the process over again by gathering additional information and considering new options. Make Inferences 4. Which do you think is better, following a process to solve a problem or making a snap decision? Why? Possible answers: Following a process; because using a process helps you consider all the information and options more carefully Evaluate

**Close and Assess**

Think and Apply 1. Identify a problem. Gather information. List and consider options. Consider advantages and disadvantages. Choose and try a solution. Decide if the solution works. 2. They heated milk to see if it would kill the germs but not harm the milk. 3. Possible answer: Today, milk is safer for people to drink.

**Helen Keller**

**Objectives**

- Identify historic figures such as Helen Keller who have exemplified good citizenship.

**Introduce and Motivate**

1. Introduce and Motivate Preview: To activate prior knowledge, ask students what they know about Helen Keller or the movie The Miracle Worker. Remind students that movies sometimes are historically inaccurate. Tell the class that in this section they will read more about Keller's life and how Keller helped people.

**Teach and Discuss**

2. Teach and Discuss 1. How did illness affect Helen Keller's life? Possible answers: It caused her to lose her eyesight and hearing. It made it difficult for her to learn to speak because she could not see or hear. Cause and Effect 2. What can you observe about Helen from the picture? She is reading a book by using her fingers instead of her eyes. Analyze Pictures 3. How did Helen Keller show courage? Possible answer: She did not let her physical problems keep her from learning or from doing the things she wanted to do. Draw Conclusions Social Studies Strand Citizenship 4. Why is Helen Keller an example of good citizenship? She worked with the American Foundation for the Blind to help people without sight become a more vital part of the community. She worked to give people who are blind a fair chance in life. Make Inferences

**Close and Assess**

3. Close and Assess Learn from Biographies Answers Possible answers: Speaking out for the rights of people with blindness; traveling; taking care of day-to-day tasks